REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Upon entry of this Amendment, claims 1 and 2 are pending in the application. In response to the Office Action (Paper No. 6), Applicant respectfully submits that the pending claims define patentable subject matter.

I. Preliminary Matters

The abstract is objected to because the Examiner maintains that the abstract exceeds 150 words in length. By this Amendment, Applicant has amended the abstract as requested. Accordingly, the Examiner is requested to remove the objection to the abstract..

II. The Present Invention

The present invention is directed to an optically compensatory polarizer for use in forming a liquid-crystal display device excellent in contrast and easy to view with a wide viewing angle but without being discolored. As shown in Figure 1, the optically compensatory polarizer 7 includes a polarizer 6, an optically compensating film 4, and an adhesive layer 5 provided as occasion demands. The polarizer 6 includes absorption type polarizing element 1, and transparent protective layers 2 and 3 provided on opposite sides of the absorption type polarizing element 1, wherein each of the transparent protective layers exhibits an in-plane retardation of not larger than 10 nm and a thicknesswise retardation in a range of from 30 to 70 nm. The optically compensating film 4 is laminated on one or each of opposite surfaces of the polarizer 6

so that a slow axis of each optically compensating film 4 crosses an absorption axis of the polarizer perpendicularly, and exhibits an in-plane retardation in a range of from 80 to 200 nm and Nz = (nx – nz)/(nx – ny) in a range of from –0.2 to 0.2 in which nz is a refractive index in a direction of a Z axis expressing a direction of the thickness of the optically compensating film, nx is a refractive index in a direction of an X axis expressing a direction of the optically compensating film in a sheet plane perpendicular to the Z axis, ny is a refractive index in a direction of a Y axis expressing a direction of the optically compensating film perpendicular both to the Z axis and to the X axis, and nx and ny satisfy the relation nx > ny.

A liquid-crystal display device 9 can be formed by arrangement of the optically compensatory polarizer 7 on one or each of opposite surfaces of a liquid-crystal cell 8.

III. Rejection of Claims 1 and 2 in view of Yoshimi et al.

A. Disclosure of Yoshimi et al.

Yoshimi et al. (U.S. Patent No. 5,245,456; hereafter "Yoshimi") discloses a birefringent film suitable for the compensation of birefringence, and a retardation film, elliptically polarizing plate, and liquid crystal display, all using the birefringent film.

As shown in Figures 1 and 2, a retardation film 3 may be formed by a single birefringent film 1 or a laminate of two birefringent films 1 secured by a transparent adhesive layer 2, wherein the retardation film 3 satisfies $0< N_z <1$ provided that $n_x > n_y$. In order for a retardation film 3 to be used for phase difference compensation to prevent coloring of liquid crystal cells, thereby attaining black-and-white display, the retardation film 3 should satisfy the equation: 100

nm < $(n_x - n_y)d$ < 1,000 nm, wherein d is the thickness of the plate, i.e., should produce a phase difference (retardation) of from 100 to 1,000 nm.

As shown in Figure 3, an elliptically polarizing plate comprises a laminate of the above-described retardation film 3 with a polarizing plate 4 wherein an adhesive layer 2 is provided on the outside of the retardation film 3 in order that the elliptically polarizing plate be bonded to a liquid crystal cell or the like.

As shown in Figure 4, a liquid crystal display includes two elliptically polarizing plates 5 including retardation films disposed on both sides of a liquid crystal cell 6. As shown in Figure 5, a liquid crystal display includes one elliptically polarizing plate 5 disposed on one side of the liquid crystal cell 6, and a polarizing film 4 disposed on the other side of the liquid crystal cell 6.

B. Analysis

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshimi. The Examiner maintains that Yoshimi discloses all of the features of independent claim 1 except for transparent protective layer each exhibiting an in-plane retardation of not larger than 10 nm and a thickness retardation on the range from 30 to 70 nm. However, the Examiner asserts that "[i]t would have been obvious ... to have integrated the aforementioned specifics of the transparent protective layers since one would be motivated to control birefringence under these conditions."

Applicant respectfully submits the claimed invention would not have been rendered obvious in view of the cited reference. In particular, Applicant submits that one of ordinary skill in the art would not have been motivated to modify Yoshimi to include "a polarizer including an absorption

type polarizing element, and transparent protective layers provided on opposite sides of said absorption type polarizing element, each of said transparent protective layers exhibiting an in-plane retardation of not larger than 10 nm and a thicknesswise retardation in a range of from 30 to 70 nm," as claimed.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify to combine the reference teachings.[1] In the present case the Examiner has failed to provide any objective reasoning why one of ordinary skill in the art would have been motivated to modify Yoshimi other than simply stating that "because these values were only recited in the specification and no particular advantages were pointed, the Examiner asserts that the general conditions, even as they are recited in the prior art would be recognized as functionally equivalent since they perform the same function for the same purposes." However, it is well settled that the characterization of certain limitations or parameters as obvious does not make the claimed invention, considered as a whole, obvious. It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This burden can only be satisfied by an objective teaching in the prior art or by cogent reasoning that the knowledge is available to one of ordinary skill in the art. See *In re Lalu*, (747 F.2d 703, 223 U.S.P.Q. 1257 (Fed. Cir. 1984)). Furthermore, an Examiner may not rely on official or judicial notice at the exact point where

[1] "To support the conclusion that the claimed invention is directed to obvious subject matter, either references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference." *Ex parte Clapp* 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

patentable novelty is argued, but must come forward with pertinent prior art. See *Ex parte Cady*, 148 U.S.P.Q. 162 (Pat. Off. Bd. App. and Inter. 1965).

According to the present invention, in-plane retardation and thicknesswise direction of the transparent protective layers for the polarizer are set in a predetermined range, and the polarizer and the optically compensating film with specific in-plane retardation and Nz are laminated such that the slow axis of the optically compensating film and the absorption axis cross perpendicularly. The optically compensatory polarizer can be obtained so that discoloration caused by light leakage can be suppressed because the optically compensatory polarizer is hardly affected by wavelength dispersion. When such optically compensatory polarizers are arranged in the form of crossed-Nicol, it is possible to reduce light leakage at an azimuth oblique to the direction of the optical axis of the polarizer as well as at an azimuth in the direction of the optical axis of the polarizer.

Although Yoshimi refers to characteristics of the birefringent film, the cited reference does not disclose to any features of the protective layer. Further, although Yoshimi discusses the improvement of the optical characteristics in the combination of the liquid crystal cell with the birefringent film, the cited reference never refers to the polarizer.

It is well-known that the smaller in-plane and thicknesswise retardation are preferable (theoretically, 0) from the aspect of securing the optical characteristics of the polarizer. However, the protective layer provides physical security/protection for the polarizer, and it requires a certain thickness. Accordingly, the claimed thicknesswise retardation (in a range of from 30 to 70) is caused due to the thickness of the protective layer. Taking the balance between

the thickness (retardation) and the mechanical strength for protection objection, the thicknesswise retardation of the protective layer is set in a range of 30 to 70 nm.

Accordingly, Applicant respectfully submits that claims 1 and 2 should be allowable because (1) the cited reference does not teach or suggest all of the features of the claims and (2) one of ordinary skill in the art would not have been motivated to modify the teachings of the cited reference to produce the claimed invention.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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